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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/655,812	09/04/2003	R. Ashby Armistead	2705-307	8007
20575 7590 12/12/2007 MARGER JOHNSON & MCCOLLOM, P.C. 210 SW MORRISON STREET, SUITE 400 PORTLAND, OR 97204			EXAMINER HARRELL, ROBERT B	
			ART UNIT 2142	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/655,812	<b>Applicant(s)</b> ARMISTEAD ET AL.	
	<b>Examiner</b> Robert B. Harrell	<b>Art Unit</b> 2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2007 and prior.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 7-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>see attached Office Action</u> .       |

1. Claims 7-26 remain presented for examination.
2. Since this application contains terminal disclaimers (i.e., filed 08 August 2006) the first page of this application must be amended with a Related Application section including United States Application Number, or United States Patent Number if so issued, the filing dates, and titles of those United States Application or United States Patents.
3. The applicant should always use this period for response to thoroughly and very closely proof read and review the whole of the application for correct correlation between reference numerals in the textual portion of the Specification and Drawings along with any minor spelling errors, general typographical errors, accuracy, assurance of proper use for Trademarks <sup>TM</sup>, and other legal symbols ®, where required, and clarity of meaning in the Specification, Drawings, and specifically the claims (i.e., provide proper antecedent basis for "the" and "said" within each claim). Minor typographical errors could render a Patent unenforceable and so the applicant is strongly encouraged to aid in this endeavor.
4. The following is a quotation of the second paragraph of 35 U.S.C 112:

**The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.**

5. *Claims 7-26 are rejected under 35 U.S.C 112, second paragraph*, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. The scope of meaning of the following claim language is not clear for the reasons indicated below.
6. Claim 7 (line 3) and claim 7 (lines 13-14) each contain "a multi-link connection". Thus it cannot be clearly certain if these two are one and the same or different (i.e., a first a multi-link connection and a second a multi-link connection). Thus causing a lack of clear antecedent bases for the remainder of the claims such as in claim 8 (line 2 "the multi-link connection"), claim 10 (line 4 "the multi-link connection") claim 11 (line 3), and other claims having "the multi-link connection". These are but a few examples of numerous cases where clear antecedent basis are lacking and not an exhausting recital. Any other term(s) or phrase(s) over looked by examiner and not listed above which start with either "the" or "said" and do not have a single proper antecedent basis also is indefinite for the reasons outlined in this paragraph. Also, these are but a few examples where term(s) or phrase(s) are introduced more than once without adequate use of either "the" or "said" for the subsequent use of the term(s) or phrase(s). Moreover, multiple introduction of a term, or changes in tense, results in a lack of clear antecedent basis for term(s) or phrase(s) which relied upon the introduced term. Failure to correct all existing cases where clear antecedent basis are lacking can be viewed as non-responsive. Nonetheless, should a response yield all claims allowable short *a few* cases where clear antecedent basis are lacking within the claims, a preemptive authorization to enter an examiner's amendment to the record to

correct such would accelerate a notice of allowance over a final rejection. Such could be added at the end of an applicant's response with the following statement: "Examiner is hereby authorized, without the need of further contact by examiner, to enter an Examiner's Amendment to correct any cases where antecedent basis are lacking." if the applicant so elects. This does not diminish the applicant's requirement to correct all such cases not so listed in the example few given above nor prohibit any amendments after a notice of allowance by the applicant.

7. Claim 20 recites "accessing a database to retrieve connection characteristic information relating to the first communication link after ending the first communication link" and then recites "routing the second communication link responsive to the connection characteristic information without interrupting the first communication link". However, the phrase, "without interrupting the first communication link" suggests that the first communication link has not ended; but, yet the characteristic information appears to be implemented prior to the ending of the first communication link, which is not possible since the connection characteristic information has yet to be retrieved. In other words, as claimed, the information is used prior to the ending of the first link, but the information is not obtained until after the ending of the first link. Thus, it cannot be clearly ascertained how information not yet received is implemented prior to receiving the information.

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this action:

**A person shall be entitled to a patent unless -**

**(e) the invention was described in — (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language;**

9. Claims 20-24 are rejected under 35 U.S.C. 102 (e) as being anticipated by Drott et al. (United States Patent Number: 6,094,683).

10. Prior to addressing the grounds of the rejections below, should this application ever be the subject of public review by third parties not so versed with the technology (i.e., access to IFW through Public PAIR (as found on <http://portal.uspto.gov/external/portal/pair>)), this Office action will usually refer an applicant's attention to relevant and helpful elements, figures, and/or text upon which the Office action relies to support the position taken. Thus, the following citations are neither all-inclusive nor all-exclusive in nature *as the whole of the reference is cited* and relied upon in this action as part of the substantial evidence of record. Also, no temporal order was claimed for all the acts and/or all the functions.

11. The rejection, and grounds for rejection, under 35 U.S.C. 102(e) as presented in examiner's prior Office Actions mailed 23 March 2007, 13 October 2006, and 08 May 2006 are all hereby maintained and incorporated in this Office Action by reference.

12. Per claim 20, as best understood by examiner in light of the above 112 matters, Drott et al. taught a method (e.g., see Abstract) for conducting a multi-link session (e.g., see Abstract), comprising:

a) receiving a set up message from a source client (e.g., see figure 1 (102 (top left))), the set up message requesting establishment of a first communication link between the source client and a termination client (e.g., see figure 1 (lower right (106)) and col. 2 (line 48-et seq.));

b) detecting a request for a second communication link from the source client (e.g., see col. 7 (lines 20-30));

c) accessing a database (e.g., see col. 5 (lines 54-et seq.)) to retrieve connection characteristic information (i.e., source and destination addresses, link speed(s), node topological location within the network for routing table(s) etc...) relating to the first communication link after ending the first communication link and before ending the second communication link (e.g., see figure 1 (121) and col. 7 (lines 20-30)); and,

d) routing the second communication link responsive to the connection characteristic information (e.g., see figure 3 and col. 3 (line 59-et seq.)) without interrupting the first communication link which has already ended.

13. Per claim 21, any sink point (termination point) such as switch 124 in figure 1 reads on the limitations of this claim in view of routing via the forwarding table of col. 6 (line 55-et seq.).

14. Per claim 22 and claim 23, since figure 1 taught the use of multi-link connection(s) for point to point communication via the network, these limitations were so covered in figure 1 and in col. 1 (line 58-et seq.).

15. Per claim 24, such would be covered in col. 7 (lines 31-54).

16. The applicant's response of 24 September 2007 argued in substance:

a) regarding claim 20, the claim recites "receiving a set up message from a source client." Nothing in Drott teaches receiving a set up message from a source client. The entire disclosure of Drott assumes that a connection exists between adjacent nodes at power-up, and the nodes begin using this connection immediately by sending idle characters to each other. See Drott column 5, lines 24-34. *However* such is the establishment of a communication channel between two elements in a system in that one must request a connection and the other take the required actions to set up the connection. Drott does teach such a set-up message means (e.g., see col. 2 (lines 48-et seq.)) and a request means per figure 2, figure 3, and column 2 (lines 48-et seq.) as part of the MAC headers. That is, the first switch means (124) requested a connection by sending a setup message (e.g., see figure 3 and col. 2 (line 48-et seq.)) to the network means (via 120 of figure 1) based on a request from an originating means (e.g., 102 of figure 1) and per the

notification as covered in col. 7 (line 30-et seq.). Elements of a system do not start communicating without first negotiating a communication protocol between the two elements as indicated in col. 3 (line 32-et seq.). In other words, when one end point needs to communicate with another end point, that end point initiating the communication must communicate its desire to communicate. Connection are not randomly made but rather are established based upon a request from an element in the system. Thus such a argued limitation is anticipated since there is communication among the elements within Drottat;. Simply using a link, for example in col. 3 (line 59-et seq.) would be a set up message within the scope of the applicant's claimed "set up message". Also, as covered in col. 7 (line 20-et seq.), at some point in time, there is a request for a communication link. Repeating col. 7 (line 20-et seq.) at another point in time further on, the request is again made. Between these two time frames, in this time window, there is a request for a first communication link and then a second communication link and there was taught a set up message requesting a first communication link;

b) claim 20 further clarifies that the set up message requests a first communication link between the source client and a termination client. As discussed previously, Drottat does not even teach that a connection exists between end point devices 102 and 104. The examiner proposes that Drottat teaches this feature at column 2, line 48-et seq. See Office Action dated May 8, 2006 paragraph 18a. This portion of Drottat simply describes how packets of information are transmitted over a single link. See Drottat column 2, lines 48-49. Drottat says nothing about how this single link is established or that the establishment of the single link includes receiving a set up message from a source client requesting a communication link to a termination client, as recited in the claim. Nothing in the remaining disclosure of Drottat remedies this deficiency. **However**, 104 is not a termination client as is element 106 of figure 1. As stated above, such is the establishment of a communication channel between two elements in a system in that one must request a connection and the other take the required actions to set up the connection. Drottat does teach such a set-up message means (e.g., see col. 2 (lines 48-et seq.)) and a request means per figure 2, figure 3, and column 2 (lines 48-et seq.) as part of the MAC headers. That is, the first switch means (124) requested a connection by sending a setup message (e.g., see figure 3 and col. 2 (line 48-et seq.)) to the network means (via 120 of figure 1) based on a request from an originating means (e.g., 102 of figure 1) and per the notification as covered in col. 7 (line 30-et seq.). Elements of a system do not start communicating without first negotiating a communication protocol between the two elements as indicated in col. 3 (line 32-et seq.). In other words, when one end point needs to communicate with another end point, that end point initiating the communication must communicate its desire to communicate. Connection are not randomly made but rather are established based upon a request from an element in the system. Thus such an argued limitation is anticipated since there is communication among the elements within Drottat;. Simply using a link, for example in col. 3 (line 59-et seq.) would be a set up message within the scope of the applicant's claimed "set up message" which encompasses Drottat's col. 5 (lines 27-et seq.). Again, as stated above, col. 7 (line 20-et seq.) taught at some point in time there was a request for a communication link. Repeating col. 7 (line 20-et seq.) at another point in time further on, the request is again made. Between these two time frames, in this time window, there is a request for a first communication link and then a second communication link and there was taught a set up message requesting a first communication link;

c) the mere fact that a connection exists in a network in Drottat does not anticipate claim features that specifically recite steps in establishing a connection between two specific network elements. Claim 20 further recites "detecting a request for a second communication link from the source client." The examiner proposes that Drottat teaches this feature at column 7, lines 20-30. See Office Action paragraph 18b. This section of Drottat describes how fabric manager 120 can reconfigure nodes in response either to polls to the nodes or interrupts sent by the nodes. The interrupts notify fabric manager 120 of network congestion. See Drottat column 7, lines 20-23. There is nothing in Drottat to suggest that an interrupt in response to network congestion is a request for a second communication link, as recited in claim 20. The Examiner argues that "congestion, in Drottat, suggests an interruption in the communication." See Office Action dated March 23, 2007 page 5, section i. One of ordinary skill in the art of network communications would not equate network congestion with interruptions in communication. Network congestion typically leads to reduced communication speeds, not communication interruptions. Further, even if network congestion were to be considered interruptions in communications, the claim features are still not met because a notification of network congestion is not a request for a second communication link, as recited in the claim. All that Drottat teaches is that fabric manager 120 may be notified by some node that there is network congestion and then the fabric manager 120 may halt communications and reconfigure the links. Therefore, Drottat does not teach the recited request for a second communication link. *However*, starting with Drottat's col. 3 (line 59), the system went from using one serial link, as shown in Drottat second figure, to multiple second communication links. As covered in Drottat's col. 7 (line 20-et seq.) a node notified the fabric manager with an interrupt packet that an increased number of links are required. As clearly stated in col. 7 (line 20-et seq.), the link (i.e., when the bundle in one as in figure 2) is halted, then the characteristics were obtained, after the first communication link ended (halted), from the database as in Drottat's col. 5 (lines 54-et seq.)), and then routing data of the second communication link without interrupting the first communication link since the first communication link has already ended;

d) claim 20 further recites detecting a request for a second communication link from the source client. The examiner proposes that Drottat teaches this feature at column 7, lines 20-30. See Office Action paragraph 18b. *However*, this section of Drottat describes how fabric manager 120 can reconfigure nodes in response either to polls to the nodes or interrupts sent by the nodes. The interrupts notify fabric manager 120 of network congestion. See Drottat column 7, lines 20-23. There is nothing in Drottat to suggest that an interrupt in response to network congestion is a request for a second communication link, as recited in claim 20. *However*, congestion, in Drottat, suggests an interruption in the communication thus requiring more bandwidth and hence the need for a second or more communication link to form the disclosed bundle's creation. Also, as stated above, starting with Drottat's col. 3 (line 59), the system went from using one serial link, as shown in Drottat second figure, to multiple second communication links. As covered in Drottat's col. 7 (line 20-et seq.) a node notified the fabric manager with an interrupt packet that an increased number of links are required. As clearly stated in col. 7 (line 20-et seq.), the link (i.e., when the bundle in one as in figure 2) is halted, then the characteristics were obtained, after the first communication link ended (halted), from the database as in Drottat's col. 5 (lines 54-et seq.)), and then routing data of the second communication link without interrupting the first communication link since the first communication link has already ended;

e) claim 20, as amended requires that the second communication link be routed without interrupting the first communication link. Drottat specifically requires that in response to network congestion, the fabric manager 120 halts communications to establish the bundled link. Therefore, Drottat does not teach routing the second communication link, as recited in the claim. For at least these reasons, claim 20 and its dependent claims, 21-24, are allowable over Drottat and the Applicant requests allowance. **However**, in light of the above rejection under 35 U.S.C. 112, second paragraph, one can not interrupt that which has been halted;

f) regarding claim 23, the claim recites "receiving a signaling channel message requesting connection on a transmission facility serving the terminating device." Once again, the Examiner does not point to any specific teachings of Drottat that could be considered equivalent to the signaling channel message, the transmission facility, or the terminating device. This is especially the case, since reading claim 23 in the context of claim 21 from which it depends, the request is the connection on a transmission facility serving the terminating device that is already carrying the first communication link. There is nothing in Drottat to teach or suggest this feature. **However**, Drottat teaches receiving a signaling message requesting connection on a transmission facility serving a terminating device as indicate above and in col. 7 (line 20-et seq.);

g) regarding claim 24, the claim recites "blocking connection requests for the second communication link on any transmission facility that does not directly serve the terminating device." As argued above with respect to claim 20, Drottat does not teach receiving a request for a second communication link. Further, even if Drottat did teach receiving a request for a second communication link, it does not teach blocking such a request for any transmission facility that does not directly serve a terminating device. The examiner points to column 7, lines 31-54 of Drottat as teaching this feature, but this section of Drottat merely describes how fabric manager 120 manages a link failure. It says nothing about blocking a request for a communication link, as recited in the claim. **However**, Drottat taught blocking termination over all links not implemented in the multi-link bundling per the Abstract in which only those links used in the bundling are actually implemented while communication is not permitted over those links not involved in the bundling. If a node is not assigned to a link, it cannot use that link and is thus blocked.

17. Claims 7-19, 25, and 26 are allowable over the art of record since the art of record fails to teach or remotely suggest the claimed subject matter per the applicant's arguments of record.

18. **A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) days from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned (see MPEP 710.02, 710.02(b)).**

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert B. Harrell whose telephone number is (571) 272-3895. The examiner can normally be reached Monday thru Thursday from 5:30 am to 2:00 pm.


20. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell, can be reached on (571) 272-3868. The fax phone number for all papers is (571) 273-8300.



Application/Control Number:  
10/655,812  
Art Unit: 2142

Page 8

21. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-9600.

  
ROBERT B. HARRELL  
PRIMARY EXAMINER  
GROUP 2142